

Creating Heat From Friction

Station materials:

- Sand paper (cut into 2" x 3" rectangles)
- Tissue paper (cut into 2" x 3" rectangles)
- Sticks (12)

Station set-up:

- Set up six stations of materials
 - Two pieces of sandpaper
 - Two pieces of tissue paper
 - Two sticks

Guiding the learning:

- Instruct students to rub two pieces of sandpaper together, then feel one to see how much heat is produced
- Repeat for tissue paper and sticks
- Ask students which material created the most heat
- Ask students if there is a relationship between the surface of the material and the heat produced (the rougher the surface, the more heat)
- Ask students if they know the name of the force that is causing the heat to be produced (Friction)

Science Talking Points:

- Friction is a force created by the touching of two surfaces
- The rougher a surface, the more friction created
- When two surfaces meet repeatedly the force of friction creates energy (often in the form of heat)